UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,002	01/20/2004	Wen-Song Tseng	TS2002-1031(N1085-90163) 1634	
****	7590 09/04/2007 RIS II P	EXAMINER		
DUANE MORRIS, LLP IP DEPARTMENT 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196			TOLEDO, FERNANDO L	
			ART UNIT	PAPER NUMBER
	•		2823	
			MAIL DATE	DELIVERY MODE
			09/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Summers	10/761,002	TSENG ET AL.				
Office Action Summary	Examiner	Art Unit				
	Fernando L. Toledo	2823				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be ting 17 apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 25 Ju	ine 2007					
	action is non-final.					
·	_					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-25 is/are pending in the application.	4)⊠ Claim(s) 1-25 is/are pending in the application.					
4a) Of the above claim(s) 10-18 is/are withdrawn from consideration.						
5) Claim(s) <u>1-9 and 19-25</u> is/are allowed.						
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to by the	Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal F 6) Other:	-асепт Аррисацоп				

1

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1 9 and 19 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshioka et al (US Patent Application Publication US 2002/0027080 A1).
- 3. In re claims 1 and 19, Yoshioka, in the US Patent Application Publication US 2002/0027080 A1; figures 1 30 and related text, discloses providing a wet processing tank within a protection bath, wherein the wafer is to be placed within the wet processing tank (Figure 1); providing a sensor apart from the wafer within said wet processing tank wherein said sensor continuously counts bubbles formed within the wet processing tank in a time interval (Figure 1); and querying said sensor wherein if a bubble count within said time interval exceeds a trigger point, then an alarm is given and said wafer is not placed into said wet processing tank (¶ 0079); and whereby floating of the wafer, and thereby wafer breakage in the wet processing tank are prevented (¶ 0074).
- 4. In re claims 2 and 20, Yoshioka discloses further comprising turning on the sensor when chemical circulation occurs within the wet processing tank (¶ 0079).

5. In re claims 3 and 21, Yoshioka discloses further including checking if the sensor emits an "OFF" signal wherein if said "OFF" signal is emitted for more than a threshold time period, then the alarm is given and the wafer is not placed into the wet processing tank (¶ 0079).

- 6. In re claims 4 and 22, Yoshioka discloses wherein the wet processing includes wet stripping, wet etching, or rinsing (Abstract).
- 7. In re claims 5 and 23, Yoshioka discloses wherein the bubbles are caused by boiling of liquid within said wet processing tank (¶ 0078).
- 8. In re claims 6 and 24, Yoshioka discloses wherein the bubbles are caused by air being sucked into a circulation loop and thus into said wet processing tank (¶ 0079).
- 9. In re claims 7 and 19, Yoshioka discloses further including providing an outer tank surrounding said wet processing tank wherein said chemical circulation includes a chemical liquid circulating out of the outer tank, through a pump, and into the processing tank (Figure 1).
- 10. In re claims 8, 19 and 25, Yoshioka discloses wherein the chemical liquid further travels through a heater, a filter and several air valves (Figure 1).
- 11. In re claims 9 and 19, Yoshioka discloses wherein the chemical liquid travels through said sensor prior to traveling through said pump (Figure 1).

Response to Arguments

12. Applicant's arguments filed 25 June 2007 have been fully considered but they are not persuasive for the following reasons.

Applicant contests that Yoshioka does not teach the limitation "a sensor apart from said wafer."

Page 4

Examiner respectfully submits that Yoshioka implicitly discloses such limitation in paragraph 0079. Yoshioka discloses that deaerator unit 328 checks for dissolved gases. Hence, the 35 USC §102(b) rejection stands and it is considered proper.

Conclusion :

13. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fernando L. Toledo whose telephone number is 571-272-1867. The examiner can normally be reached on Mon-Fri 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2823

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) at 571-272-1090.

Fernando L. Toledo Primary Examiner Art Unit 2823

flt 30 August 2007